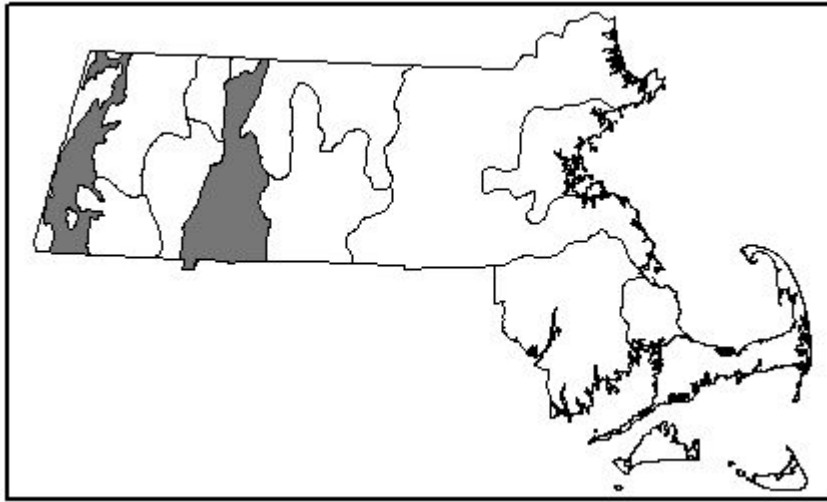


Community Name: CALCAREOUS ROCKY SUMMIT / ROCK OUTCROP
Community Code: CT2A1C0000
SRANK: S2



Concept: An open community of shrubs and herbaceous plants occurring on open calcareous ridge tops of the low hills edging the valleys in the Western New England Marble Valleys eco-region as well as steep, mid-slope calcareous ledges found in the same region.

Environmental Setting: Ridge top calcareous outcrops are dry and typically are found on the ridge tops of low hills in the calcareous regions of Berkshire County. Their open aspect is maintained by trees uprooting and pulling away from the steep ridge top areas. Because, most calcareous bedrock in Massachusetts is overlain by more resistant acidic rocks, the community tends to be found on rock outcrops rather than actual rocky summits. The substrate grades from rock outcrops to steeper, but moister, shaded cliff faces which support Calcareous Cliff Communities.

Vegetation Description: The ridge top community supports relatively sparse herbaceous vegetation that includes ivory sedge (*Carex eburnea*), purple clematis (*Clematis occidentalis*), long-leaved bluet (*Hedyotis longifolia*), balsam groundsel (*Senecio pauperculus*) and lyre-leaved rock-cress (*Arabis lyrata*). Shrubs include round-leaved dogwood (*Cornus rugosa*), roundleaf shadbush (*Amelanchier sanguinea*) as well as the less common northern prickly rose (*Rosa acicularis*), hairy honeysuckle (*Lonicera hirsuta*) and downy arrowwood (*Viburnum rafinesquianum*). Calcareous rock outcrop off the summit ridges tend to be moister and are lightly shaded by trees characteristic of rich mesic forests including sugar maple (*Acer saccharum*), white ash (*Fraxinus americana*), and hop-hornbeam (*Ostrya virginiana*). The herbaceous layer can include species characteristic of rich mesic forests but typically has a high proportion of ferns such as bulblet fern (*Cystopteris bulbifera*), fragile fern (*C. tenuis*), ebony spleenwort (*Asplenium platyneuron*), maidenhair spleenwort (*A. trichomanes*), walking fern (*Asplenium rhizophyllum*) and blunt lobed wood fern (*Woodsia obtusa*) as well as the rarer ferns, purple cliff-break (*Pellaea atropurpurea*) and wall rue spleenwort (*Asplenium ruta-muraria*). Other plants that are frequently found on these ledges include ivory sedge (*Carex eburnea*), Pennsylvania sedge (*Carex pennsylvanica*), harebell (*Campanula rotundifolia*), peduncled sedge (*Carex pedunculata*), early saxifrage (*Saxifraga virginensis*), lyre-leaved rock-cress (*Arabis lyrata*), smooth rock-cress (*A. laevigata*), columbine (*Aquilegia canadensis*) and balsam groundsel (*Senecio pauperculus*).

Associations:

Habitat Values for Associated Fauna:

Most animals of rock outcrop communities are not sensitive to the chemistry of the rock, but rather are responding to the elevation and dryness of the habitat. Any differences in resident fauna between calcareous and acidic outcrops are most likely due to geographical differences in species distribution rather than to qualitative differences among the types of outcrops. Calcareous outcrops are in the western part of Massachusetts, and so have the species that don't occur in coastal areas such as deer mouse (*Peromyscus maniculatus*), woodland jumping mouse (*Napaeozapus insignis*), and smoky shrew (*Sorex fumeus*), as well as other, more widespread small mammals of dry habitats. Outcrops tend to be fairly small, and only a part of the habitat of most vertebrate animals. Snakes are those of dry areas, such as black racer (*Coluber constrictor*), ringneck (*Diadophis punctatus*), and redbelly snake (*Storeria*

Natural Heritage & Endangered Species Program, Massachusetts Division of Fisheries & Wildlife

occipitomaculata). No turtles, frogs or toads would be expected. Ravens (*Corvus corax*) are all around high elevations, especially near cliffs where they nest. Invertebrates include tiger beetles.

Associated Rare Plants:

AMELANCHIER SANGUINEA	ROUNDLEAF SHADBUSH	SC
ARABIS LAEVIGATA	SMOOTH ROCK-CRESS	T
ARABIS LYRATA	LYRE-LEAVED ROCK-CRESS	T
ASPLENIUM RUTA-MURARIA	WALL-RUE SPLEENWORT	T
CHAMAELIRIUM LUTEUM	DEVIL'S-BIT	E
CLEMATIS OCCIDENTALIS	PURPLE CLEMATIS	SC
HOUSTONIA LONGIFOLIA VAR LONGIFOLIA	LONG-LEAVED BLUET	T
LONICERA HIRSUTA	HAIRY HONEYSUCKLE	E
MINUARTIA MICHAUXII	MICHAUX'S SANDWORT	SC
PELLAEA ATROPURPUREA	PURPLE CLIFF-BRAKE	- WL
ROSA ACICULARIS	NORTHERN PRICKLY ROSE	E
SELAGINELLA RUPESTRIS	ROCK SPIKEMOSS	- WL
TRICHOSTEMA BRACHIATUM	FALSE PENNYROYAL	E
VIBURNUM RAFINESQUIANUM	DOWNY ARROWWOOD	T

Associated Rare Animals:

NONE KNOWN

Examples with Public Access:

Bartholomew's Cobble (TTOR) -- Sheffield; Bashbish Falls State Park -- Mt. Washington.

Threats:

These communities can be threatened by development and by invasive species. This community has a number of non-native invasives including Morrow's honeysuckle (*Lonicera morrowii*), Japanese barberry (*Berberis japonica*), and multiflora rose (*Rosa multiflora*).

Management Needs:

Control of invasive species.

Synonyms

USNVC/TNC:

Includes: Juniperus virginiana Woodland Alliance -- Juniperus virginiana - Ostrya virginiana / Carex eburnea Woodland [CEGL006180]; Includes part of: Juniperus virginiana - Quercus muehlenbergii Woodland Alliance -- Juniperus virginiana var. virginiana - Quercus muehlenbergii Woodland [CEGL003757] [Provisional]; Possibly - Schizachyrium scoparium - Bouteloua curtipendula evergreen or mixed wooded herbaceous Alliance -- Juniperus virginiana / Bouteloua curtipendula - Carex eburnea Wooded Herbaceous Vegetation [CEGL006047].

MA (old name):

SNE Calcareous Rocky summit/ Rock Outcrop Community.

ME:

Not described.

NH:

1997 - includes Rich [basic] Rocky ridge (Juniperus horizontalis); 1994 - part of Calcareous rocky summit/rock outcrop community; part of calcareous cliff community.

VT:

Calcareous Outcrop Community.

NY:

Includes: Red Cedar Rocky Summit; Includes parts of - Rocky summit grassland; Calcareous talus slope woodland; Calcareous pavement barrens.

CT:

Includes: Juniperus virginiana Woodlands; Includes a community similar to: Schizachyrium scoparium-Bouteloua curtipendula temperate Grasslands.

RI:

Includes: Red Cedar Rocky summit.

Weatherbee:

Southern calcareous rocky summit.

Author:

Karen Searcy

Date:

3/28/00